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WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

WO 99/28939

(51) International Patent Classification 6 :
H01J 1/30, 9/02

A1

(11) International Publication Number:

(43) International Publication Date:

10 June 1999 (10.06.99)

(21) International Application Number: PCT/GB98/03582

(22) International Filing Date: 3 December 1998 (03.12.98)

(30) Priority Data:
9725658.0 4 December 1997 (04.12.97) GB
9819647.0 10 September 1998 (10.09.98) GB

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(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR,
BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR,
KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,
MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,
SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW,
ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR,
GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF,
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN,
TD, TG).

Published

With international search report.
Before the expiration of the time limit for amending the
claims and to be republished in the event of the receipt of
amendments.

(54) Title: FIELD ELECTRON EMISSION MATERIALS AND DEVICES

(57) Abstract

A field electron emission material is formed by coating a substrate (221, 230) having an electrically conductive surface with a plurality of electrically conductive particles (223, 231). Each particle has a layer of electrically insulating material (222, 232) disposed either in a first location between the conductive surface of the substrate (221) and the particle (223), or in a second location between the particle (231) and the environment (237) in which the field electron emission material is disposed, but not in both of such first and second locations, so that at least some of the particles (223, 231) form electron emission sites at such first or second locations. A number of field emission devices are disclosed, utilising such electron emission material.

